

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed August 15, 2006. At the time of the Office Action, Claims 1-24 were pending in this Application. Claims 1-24 were rejected.

Rejections under 35 U.S.C. §103

Claims 1-3, 10-11, 14-16, and 21-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 4,618,822 issued to Per K. Hansen (“Hansen”) in view of U.S. Patent 3,756,081 issued to Robert Eric Young (“Young”). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Claims 7-9 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hansen in view of Young and further in view of U.S. Patent 4,127,110 issued to Leo A. Bullara (“Bullara”). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hansen in view of Young and further in view of U.S. Patent 3,628,381 issued to Martin L. Aronow et al. (“Aronow”). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Claims 4-6, 13, and 17-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hansen in view of Young and further in view of U.S. Patent 4,556,886 issued to Wataru Shimizu et al. (“Shimizu”). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Claim 1 has been amended to recite additional features of the invention. Specifically, Claim 1 has been amended to recite additional features of the interrogator, namely that it is operable to detect a shift in the peak frequencies of the sensors and to determine the distance between the sensors based on that shift. (page 16, lines 25 – 30 and lines 14-17).

As recognized by the Examiner, the Hanson does not teach a pair of sensors that are parallel or that indicate the motion of the sensors relative to each other. According to the Examiner, Young discloses this feature of the invention.

The Examiner is incorrect. In Young, the embodiment of Figure 1 does not teach or suggest a device to measure the distance between two sensors. It measures movement of a single member 9, by detecting a frequency associated with member 9 relative to the output of the pre-fixed oscillator. The pre-fixed oscillator 2 of Young is equivalent to the interrogator of Claim 1. The wire 10 is not a second sensor; it is used to fix the inductance of the pre-fixed oscillator. As is made clear in connection with Figure 5, wire 10 is an “adjustment wire” (col. 2, lines 56-57). There is no second sensor in Figure 1 of Young.

Further in Young, the embodiment of Figure 5 does show two displacement wires 9 and 19, which may both move. However, the wires of Young are not used to determine the distance between them. Instead, the wires are used for temperature measurement (col. 3, line 48), and the two wires provide a differential measurement. The second wire is used for increased sensitivity, not for measuring distance from a first wire. Inherent in the embodiment of Figure 5 is that wires 9 and 19 move dependently, not independently of each other. They move in equal but opposing directions.

In contrast, the invention of Claim 1 recites two sensors that are not attached to each other. Thus, they are independently moveable.

Accordingly, Claim 1 and its dependent claims are allowable. Claims 14 and 23 have been amended in a manner similar to the amendment of Claim 1, and they and their dependent claims are also allowable.

CONCLUSION

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of all pending claims as amended.

Applicants enclose a Petition for Three Month Extension of Time and authorize the Commissioner to charge the \$510.00 fee to Deposit Account No. 50-2148 of Baker Botts L.L.P. Applicants believe there are no additional fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2634.

Respectfully submitted,
BAKER BOTT S L.L.P.
Attorney for Applicants



Ann C. Livingston
Reg. No. 32,479

Date: 1/18/07

SEND CORRESPONDENCE TO:
BAKER BOTT S L.L.P.
CUSTOMER ACCOUNT NO. **31625**
512.322.2634
512.322.8383 (fax)